



At a Glance

Why We Did This Review

The U.S. Environmental Protection Agency (EPA), Office of Inspector General (OIG), conducted this audit to evaluate the adoption of cloud computing for the Office of Water's Permit Management Oversight System (PMOS). We also reviewed an executed contract between the agency and a cloud service provider for compliance with applicable standards.

The PMOS is a Web-based application developed to meet the needs of the Office of Wastewater Management within the Office of Water. PMOS enables tracking and managing of the Priority Permit Initiative. PMOS enables EPA headquarters, EPA regions and individual states to work collaboratively to designate, track and report on the progress of priority permits.

This report addresses the following EPA goal or cross-agency strategy:

- *Embracing EPA as a high-performing organization.*

Send all inquiries to our public affairs office at (202) 566-2391 or visit www.epa.gov/oig.

The full report is at: www.epa.gov/oig/reports/2015/20150924-15-P-0295.pdf

EPA Needs to Improve the Recognition and Administration of Cloud Services for the Office of Water's Permit Management Oversight System

What We Found

The EPA is not fully aware of the extent of its use of cloud services, and thereby is missing an opportunity to help make the most efficient use of its limited resources regarding cloud-based acquisitions.

Inadequate contract oversight jeopardized information security and government transparency.

The Office of Water did not follow EPA procedures when implementing PMOS, and the office did not know whether it was in the agency's best interest to establish the system.

Additionally, inadequate oversight of the Office of Water's PMOS contractor resulted in inadequate controls over EPA data. In particular, the EPA failed to establish adequate requirements for the hosting of PMOS, resulting in PMOS being hosted in a cloud service provider's environment that did not comply with federal security requirements. There was also no assurance that the EPA has access to the service provider's cloud environment for audit and investigative purposes. In addition, the service provider's terms of service were not compliant with the Federal Risk and Authorization Management Program.

Furthermore, the PMOS jeopardized government transparency by being hosted on an Internet domain registered to a prior contractor, and by allowing the service provider to host PMOS-provided email services that may not be considered when responding to Freedom of Information Act requests.

Recommendations and Planned Agency Corrective Actions

We recommend that the Assistant Administrator for Water, the Assistant Administrator for Administration and Resources Management, and the Chief Information Officer undertake seven corrective actions to address deficiencies in the EPA's cloud computing initiatives. Among other things, we recommend that the EPA take steps to appoint a lead office to evaluate information technology hosting proposals, develop a cloud system inventory, and develop guidance and train personnel on how to identify vendor proposals that may include cloud services. We also recommend that EPA take steps to develop and implement an approved PMOS system authorization package, determine the cost effectiveness for operating PMOS, and search the PMOS hosting environment for potential EPA records.

While the EPA agreed with our recommendations, management provided corrective actions and completion dates that only satisfied four of the recommendations. The agency did not provide sufficient information to allow us to determine whether its intended corrective actions would address our concerns for the three remaining recommendations. These three recommendations are considered unresolved pending the agency's response to the final report.